

REMARKS

In the Office Action of February 7, 2002 the Examiner objected to Applicants' proposed Amendment to the drawings and specification as introducing new matter, and rejected all claims as anticipated or obvious over WIPO 96/13417, alone or combined with other references. The specification is objected to for using reference number 8 to refer to two items.

As set forth above, applicants have amended the specification at Paragraph 23 to correct the reference number objected to by the Examiner and a typographic error.

Applicants respectfully request reconsideration of the Examiner's disapproval of the drawing correction and amendment to the specification , and request entry of the same in view of the remarks set forth below.

Applicants respectfully traverse the rejections of the claims as anticipated or obvious in view of the Drumm reference and request reconsideration thereof in view of the remarks set forth below.

With respect to the "New Matter" objection to the amendments submitted on May 14, 2002, Applicants request reconsideration on the grounds that the proposed amendments do not constitute new matter. It is initially noted that claim 16 as originally filed recited that the processor was part of one electronic stability system. This claim was objected to as not being illustrated in the drawings. In the Office action of February 7, 2002, the Examiner responded to applicants' contention that this subject matter was

illustrated in Figure 3 by recommending the very drwaing correction that applicant proposed. The Examiner now contends that this requested correction is "New Matter".

It is first noted that incorporation into a drawing of subject matter claimed in the original application is not new matter (see MPEP 706.03(o)). Likewise subject matter of a claim may be incorporated into the specification by amendment (MPEP 2163.06 III). In addition rephrasing of the specification does not constitute new matter (MPEP 2163.07 I). The amendments proposed by applicants do not add any substantive disclosure, but merely constitute identification of the components of the original disclosed material that form support for the subject matter of original claim 16. Applicants have merely grouped those components together, as suggested by the examiner, and accordingly the amendments to the specification and drawings constitute mere rephrasing of the original disclosure to conform to the original claim 16, as expressly permitted by the MPEP. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the "New Matter" Objection and rejection, enter the amendment of May 14 and approve the requested drawing correction.

Applicants have carefully considered the Examiner's rejections based primarily on the Drumm reference, and request reconsideration on the grounds that the Examiner has improperly interpreted the reference in view of Applicants' disclosure.

Applicants invention is a braking system and method wherein dynamic conditions of a vehicle are detected and analyzed to detect a condition of vehicle instability. When instability is detected, either the force boosting effect of the braking force booster is

increased (claims 1 and 12) or a signal is provided to a brake actuator to overcome free play in the brake clamping device.

The Drumm reference discloses a controller 25 for an anti-lock braking system which is discussed therein as follows:

A controll signal from the electronic controller 25 permits an independent actuation of the vacuum control valve 8, even if the independent actuation is superimposed on an actuating force from the brake pedal 6. (col 3, lines 9-13)

Signals from the brake pedal force sensor are sent to the controller 25. (Col 3, lines 53-55)

The output signals of the sensors are sent to the controller 25 along with other signals representing steering wheel angle, wheel rotational speed, and vehicle reaction such as yaw velocity, or transverse acceleration. (Col. 3, lines 60-67) Further the electronic controller is provided with data about the condition of the brake force booster on signal line 31.

When independent assist braking starts with an insufficient vacuum level in the vacuum chamber of the brake force booster 5, the electronic controller 25, in conjunction with an engine controller 30 must throttle the engine 29, for example by an electronically controlled acceleration device. (Col. 4, lines 45-50)

While Drumm discloses that the electronic controller 25 receives signals that represent the dynamic condition of the vehicle, Drumm does not disclose how such signals are processed or used. None of the references to the electronic controller in the

Drumm reference discusses the processing of this data, and the reference certainly fails to disclose an analysis to detect a condition of vehicle instability, which is characteristic of applicants claims.

Drumm describes a system which has the objective that "... upon commencement of the control, the brake force booster has achieved the maximum attainable boosting force irrespective of the driver's wish, and the desired wheel braking pressures are adjusted by way of the ABS hydraulic unit." (Col 1, lines 40-45)

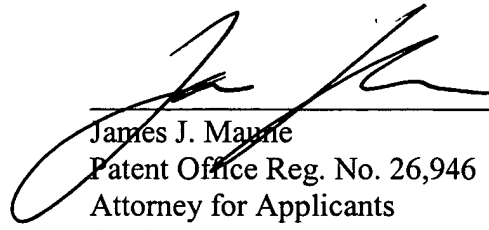
Drumm causes solenoid 26 to open valve 8 to provide the full force of the booster upon every actuation of the braking system, as stated at Column 4, lines 13-16. This passage does not support the Examiner's contention in the Office Action on page 4, line 2 that the reference discloses increasing the force of the booster when the analysis indicates a condition of vehicle instability.

Accordingly, the Drumm reference totally fails to disclose the analysis of vehicle dynamic conditions to detect vehicle instability, or the application of the results of that analysis to either increase braking force or to overcome the free play in the brake clamping devices as specified in the pending claims. The remaining references do not make up for these specific deficiencies of the Drumm reference and accordingly fail to render the claims obvious.

This application is believed to be in condition for allowance. If further issues arise the Examiner is invited to telephone the undersigned.

Attached hereto is a **Version With Markings to Show Changes Made.**

Respectfully submitted,



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**VERSION WITH MARKINGS TO SHOW CHANGES MADE**In the Specification:

Please amend paragraph 0023 as follows:

[0023]        A first example of a device according to the invention, shown in Figure 1, has a processor 1 for monitoring vehicle dynamic conditions and detecting a condition of vehicle instability. Processor 1 receives signals from detectors, such as steering wheel angle  $W_1$  rotational wheel speed  $M_R$ , yaw rate  $G_R$  and transverse acceleration  $\dot{V}_{quer}$ , and provides an output signal A1, which may be provided to [by] an Electronic Stability (ESP) control unit 8, for vehicle movement dynamics control, as well as to a brake controller 3. Brake controller 3 operates to control the operation of braking force booster 2, which increases the braking force supplied by the brake pedal [8] 9. Controller 3 provides for variation in the braking force applied to the vehicle wheels as a function of applied brake pedal force.